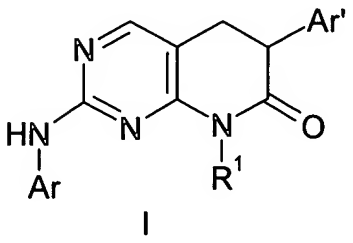
What is claimed is:

1. A compound of formula



I

or a pharmaceutical acceptable salt thereof, wherein

Ar and Ar' are independently selected from the group consisting of aryl, substituted aryl, heteroaryl and substituted heteroaryl, with the proviso that for Ar, the heteroaryl is not 2-pyridyl and substituted heteoraryl is not substituted 2-pyridyl;

R^1 is selected from the group consisting of

H;

C_{1-10} alkyl;

C_{1-10} alkyl independently substituted by up to three groups selected from aryl, heteroaryl, heterocycle, cycloalkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2, wherein the aryl, heteroaryl, heterocycle and cycloalkyl groups may each independently be substituted by up to three groups selected from NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

aryl;

aryl independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

heteroaryl;

heteroaryl independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

heterocycle;

heterocycle independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

C_{3-10} cycloalkyl;

C_{3-10} cycloalkyl independently substituted by up to three groups selected from lower alkyl, substituted lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

C_{2-10} alkenyl;

C_{2-10} alkenyl independently substituted by up to three groups selected from cycloalkyl, substituted cycloalkyl, heterocyclyl, substituted heterocycloalkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

C_{2-10} alkynyl; and

C_{2-10} alkynyl independently substituted by up to three groups selected from NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2; and wherein R^8, R^9 and R^{10} are independently H or lower alkyl;

R^{11} and R^{12} are independently selected from the group consisting of

H;

unsubstituted lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$;

unsubstituted cycloalkyl;

cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

unsubstituted heterocycle;

heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

or alternatively $NR^{11}R^{12}$ forms a ring having 3 to 7 atoms, the ring having no or at least one additional heteroatoms, with the proviso that if the heteroatom is N, the heteroatom may be substituted by one or more substituents selected from the group consisting of lower alkyl, OR^{13}, COR^{14}, CO_2R^{14}, $CONR^{14}R^{15}$, SO_2R^{14}, and $SO_2NR^{14}R^{15}$;

R^{13} is selected from the group consisting of

H;

COR^{14};

$CONR^{14}R^{15}$;

unsubstituted lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$,

unsubstituted cycloalkyl;

cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$,

unsubstituted heterocycle; and
heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

R^{14} and R^{15} are independently selected from the group consisting of
H;
unsubstituted lower alkyl;
lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$,
unsubstituted cycloalkyl;
cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;
unsubstituted heterocycle;
heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;
or alternatively $NR^{14}R^{15}$ forms a ring having 3 to 7 atoms, the ring having no or at least one hetero atoms, with the proviso that if the heteroatom is N, the heteroatom may be substituted by one or more substituents selected from the group consisting of lower alkyl, OR^{23}, COR^{23}, CO_2R^{23}, $CONR^{23}R^{24}$, SO_2R^{23}, $SO_2NR^{23}R^{24}$;

R^{21} is selected from the group consisting of H, lower alkyl, COR^{23} or CO_2R^{23};

R^{22}, R^{23} and R^{24} are independently selected from the group consisting of H or lower alkyl, or alternatively $NR^{21}R^{22}$ or $NR^{23}R^{24}$ independently forms a ring having 3 to 7 atoms, the ring having no or at least one additional heteroatoms selected from the group consisting of N, O, or S, with the proviso that if the heteroatom is N, the heteroatom may be in the form of -NH or NR^{25}, and if the hetero atom is S, it may be in the form of $S(O)_m$ where m = 0, 1 or 2; and

R^{25} is lower alkyl.

2. The compound of claim 1 wherein Ar is a substituted heteroaryl, with the proviso that the substituted heteroaryl is not 2-pyridyl.

3. The compound of claim 1 wherein Ar' is aryl, substituted aryl or heteroaryl.

4. The compound of claim 1 wherein R^1 is aryl, substituted aryl or heteroaryl.

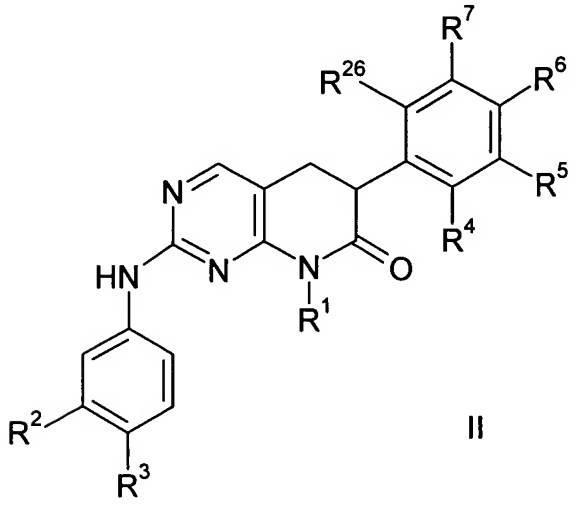
5. pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 and a pharmaceutically acceptable carrier or excipient.

6. A method for treating cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 1.

7. The method of claim 6 wherein the cancer is breast, lung, colon or prostate.

8. A method of controlling cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 1.

9. A compound of formula



II

or a pharmaceutically acceptable salt thereof, where

R^1 is selected from the group consisting of

H;

C_{1-10} alkyl;

C_{1-10} alkyl independently substituted by up to three groups selected from aryl, heteroaryl, heterocycle, cycloalkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2, wherein the aryl, heteroaryl, heterocycle and cycloalkyl groups may each independently be substituted by up to three groups selected from NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

aryl;

aryl independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

heteroaryl;

heteroaryl independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

heterocycle;

heterocycle independently substituted by up to three groups selected from lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

$C_{3\text{-}10}$ cycloalkyl;

$C_{3\text{-}10}$ cycloalkyl independently substituted by up to three groups selected from lower alkyl, substituted lower alkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

$C_{2\text{-}10}$ alkenyl;

$C_{2\text{-}10}$ alkenyl independently substituted by up to three groups selected from cycloalkyl, substituted cycloalkyl, heterocyclyl, substituted heterocycloalkyl, NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2;

$C_{2\text{-}10}$ alkynyl; and

$C_{2\text{-}10}$ alkynyl independently substituted by up to three groups selected from NR^8R^9, OR^{10}, SR^{10}, halogen, COR^{11}, CO_2R^{11}, $CONR^{11}R^{12}$, $SO_2NR^{11}R^{12}$, SOR^{11}, SO_2R^{11}, CN and NO_2; and wherein R^8, R^9 and R^{10} are independently H or lower alkyl;

R^2 and R^3 are independently selected from the group consisting of

$NR^{11}R^{12}$;

OR^{13};

SR^{16};

halogen;

COR^{14};

CO_2R^{14};

$CONR^{14}R^{15}$;

$SO_2NR^{14}R^{15}$;

SO_2R^{14};

CN;

NO_2;

$(CH_2)_n$heteroaryl;

$(CH_2)_n$heterocycle;

C_1-C_{10} alkyl;

C_3-C_{10} cycloalkyl;

C_2-C_{10} alkenyl;

C_2-C_{10} alkynyl;

where n is 0, 1, 2, or 3 and the aryl, heteroaryl, heterocycle, alkyl, cycloalkyl, alkenyl, and alkynyl groups are unsubstituted or substituted by up to three groups selected from

$NR^{11}R^{12}$;

OR^{13};

SR^{16};

halogen;

COR^{14};

CO_2R^{14};

$CONR^{14}R^{15}$;

$SO_2NR^{14}R^{15}$;

SO_2R^{14};

CN; and

NO_2;

or alternatively, R^2 and R^3 together form a ring having 3 to 7 atoms fused to the phenyl ring that they are attached to, the ring having no or at least one additional heteroatoms, with the proviso that if the heteroatom is N, the heteroatom may be substituted by at least one substituent selected from the group consisting of

lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{11}R^{12}$;

$NR^{11}R^{12}$;

OR^{13};

SR^{16};

COR^{14};

CO_2R^{14};

$CONR^{14}R^{15}$;
$SO_2NR^{14}R^{15}$;
SO_2R^{14}; and
CN;

R^4, R^5, R^6, R^7 and R^{26} are independently selected from the group, with at least one being H, consisting of

H;
unsubstituted lower alkyl;
lower alkyl substituted by hydroxy, alkoxy or halogen;
$NR^{21}R^{22}$;
OR^{23};
SR^{23};
halogen;
NO_2;
COR^{23};
CO_2R^{23};
$CONR^{23}R^{24}$;
$SO_2NR^{23}R^{24}$;
SO_2R^{23}; and
CN;

R^{11} and R^{12} are independently selected from the group consisting of

H;
unsubstituted lower alkyl;
lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$;
unsubstituted cycloalkyl;
cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;
unsubstituted heterocycle; and
heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;
or alternatively $NR^{11}R^{12}$ forms a ring having 3 to 7 atoms, the ring having no or at least one additional heteroatoms, with the proviso that if the hetero atom is N, the heteroatom may be substituted by one or more substituents selected from the

group consisting of lower alkyl, COR^{14}, CO_2R^{14}, $CONR^{14}R^{15}$, SO_2R^{14}, and $SO_2NR^{14}R^{15}$;

R^{13} is selected from the group consisting of

H;

COR^{14};

$CONR^{14}R^{15}$;

unsubstituted lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$,

unsubstituted cycloalkyl;

cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$,

unsubstituted heterocycle; and

heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

R^{14} and R^{15} are independently selected from the group consisting of

H;

unsubstituted lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$;

unsubstituted cycloalkyl;

cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

unsubstituted heterocycle; and

heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$,

or alternatively $NR^{14}R^{15}$ forms a ring having 3 to 7 atoms, the ring having no or at least one additional heteroatoms, with the proviso that if the heteroatom is N, the heteroatom may be substituted by one or more substituents selected from the group consisting of one or more lower alkyl, COR^{23}, CO_2R^{23}, $CONR^{23}R^{24}$, SO_2R^{23}, $SO_2NR^{23}R^{24}$;

R^{16} is selected from the group consisting of

unsubstituted lower alkyl;

lower alkyl substituted by hydroxy, alkoxy or $NR^{21}R^{22}$,

unsubstituted cycloalkyl;

cycloalkyl substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$,

unsubstituted heterocycle; and

heterocycle substituted by hydroxy, alkoxy, lower alkyl or $NR^{21}R^{22}$;

R^{21} is selected from the group consisting of H, lower alkyl, COR^{23} or CO_2R^{23};

R^{22}, R^{23} and R^{24} are independently selected from the group consisting of H or lower alkyl, or alternatively $NR^{21}R^{22}$ or $NR^{23}R^{24}$ independently forms a ring having 3 to 7 atoms, the ring having no or at least one additional heteroatom selected from the group consisting of N, O, and S, with the proviso that if the heteroatom is N, the heteroatom may be in the form of -NH or NR^{25}, and if the hetero atom is S, it may be in the form of $S(O)_m$ where m = 0, 1 or 2; and

R^{25} is lower alkyl.

10. The compound of claim 9 wherein R^6 is OR^{23}.

11. The compound of claim 9 wherein R^4 and R^{26} are halogen.

12. The compound of claim 9 wherein R^5 and R^7 are OR^{23}.

13. The compound of claim 9 wherein R^{26} is an unsubstituted lower alkyl.

14. The compound of claim 9 wherein R^4, R^5, R^6 and R^{26} are H.

15. The compound of claim 9 wherein R^5 and R^{26} are OR^{22}.

16. The compound of claim 9 wherein R^{26} is OR^{23}.

17. The compound of claim 9 wherein R^6 and R^7 are OR^{23}.

18. The compound of claim 9 wherein R^6 is OR^{23}.

19. A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 9 and a pharmaceutically acceptable carrier or excipient.

20. A method for treating cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 9.

21. The method of claim 20 wherein the cancer is breast, lung, colon or prostate.

22. A method of controlling cancer comprising administering to a patient in need of such treatment a therapeutically effective amount of a compound of claim 9.

23. A compound selected from the group:
6-(4-Methoxy-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 1f);
6-(2,6-Dichloro-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 2c);
6-(3,5-Dimethoxy-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 3d);
8-Phenyl-2-phenylamino-6-O-tolyl-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 4c);
6,8-Diphenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 5c);
6-(2,5-Dimethoxy-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 6c); and
6-(2-Methoxy-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 7c).

24. A compound selected from the group:
6-(3,5-Bis-trifluromethyl-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (example 8d);
8-Phenyl-2-phenylamino-6-pyridin-4-yl-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 9c);
8-Phenyl-2-phenylamino-6-pyridin-3-yl-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 10c);
6-(3,4-Dimethoxy-phenyl)-8-phenyl-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidin-7-one (Example 11c);
6-(4-Methoxy-phenyl)-2-(6-methoxy-pyridin-3-ylamino)-8-phenyl-5,8-dihydro-6H-pyrido[2,3-d]pyrimidine-7-one (Example 12d);

8-Isobutyl-6-(4-methoxy-phenyl)-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidine-7-one (Example 13b); and
8-Cyclopropylmethyl-6-(4-methoxy-phenyl)-2-phenylamino-5,8-dihydro-6H-pyrido[2,3-d]pyrimidine-7-one (Example 14b).

25. A compound selected from the group:
3-(2,4-Dichloro-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 1d);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 1e);
2-(2,6-Dichloro-phenyl)-3-(2,4-dichloro-pyrimidin-5-yl)-propionic acid methyl ester (Example 2a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(2,6-Dichloro-phenyl)-propionic acid methyl ester (Example 2b);
3-(2,4-Dichloro-pyrimidin-5-yl)-2-(3,5-dimethoxy-phenyl)-propionic acid methyl ester (Example 3b);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(3,5-dimethoxy-phenyl)-propionic acid methyl ester (Example 3c);
3-(2,4-Dichloro-pyrimidin-5-yl)-2-O-tolyl-propionic acid methyl ester (Example 4a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-O-tolyl-propionic acid methyl ester (Example 4b)
3-(2,4-Dichloro-pyrimidin-5-yl)-2-phenyl-propionic acid methyl ester (Example 5a); and
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-phenyl-propionic acid methyl ester (Example 5b).

26. A compound selected from the group:
3-(2,4-Dichloro-pyrimidin-5-yl)-2-(2,5-dimethoxy-phenyl)-propionic acid ethyl ester (Example 6a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(2,5-dimethoxy-phenyl propionic acid ethyl ester (Example 6b);
3-(2,4-Dichloro-pyrimidin-5-yl)-2-(2-methoxy-phenyl)-propionic acid methyl ester (Example 7a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(2-methoxy-phenyl) propionic acid ethyl ester (Example 7b);

2-(3,5-Bis-trifluoromethyl-phenyl)-3-(2,4-dichloro-pyrimidin-5-yl)-propionic acid methyl ester (Example 8b);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(3,5-bis-trifluoromethyl-phenyl)-propionic acid methyl ester (Example 8c);
3-(2,4-Dichloro-pyrimidin-5-yl)-2-pyridin-4-yl-propionic acid ethyl ester (Example 9a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-pyridin-4-yl-propionic acid ethyl ester (Example 9b);
3-(2,4-Dichloro-pyrimidin-5-yl)-2-pyridin-3-yl-propionic acid ethyl ester (Example 10a); and
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-pyridin-3-yl-propionic acid ethyl ester (Example 10b).

27. A compound selected from the group:
3-(2,4-Dichloro-pyrimidin-5-yl)-2-(3,4-dimethoxy-phenyl)-propionic acid ethyl ester (Example 11a);
3-(2,4-Diphenylamino-pyrimidin-5-yl)-2-(3,4-dimethoxy-phenyl)-propionic acid ethyl ester (Example 11b);
3-(4-Chloro-2-phenylamino-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 12a);
3-(2-Chloro-4-phenylamino-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 12b);
3-[2-(6-Methoxy-pyridin-3-ylamino)-4-phenylamino-pyrimidin-5-yl]-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 12c);
3-(2-Phenylamino-4-isobutylamino-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 13a); and
3-(2-Phenylamino-4-cyclopropylmethylamino-pyrimidin-5-yl)-2-(4-methoxy-phenyl)-propionic acid methyl ester (Example 14a).